

Work Order ID 157250

Friday, February 17, 2017 1:31:19 PM

157250

Page 1

Item ID: 647.3902 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Lower Deflector Assembly, High
Start Date: 2/21/2017 Start Qty: 2.00 *?
Required Date: 3/8/2017 Req'd Qty: 2.00 *?
Reference: Cust Item ID:
Customer:

Approvals: Process Plan: DAS 21 9-89 Date: FEB 22 2017 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
647.3900	C2								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120		0.00							
120									
Small Fab	Memo	0.11							
Small Fab	Assemble as per dwg and apply loctite 598 on all faying surfaces per note .								
	A/R RTV LOCTITE 598: <u>136701</u>								
	exp. date: <u>10/18</u>								
130	QC5- Inspect part completeness to step on W/O	0.00							
130									
QC	Memo	0.01							
Quality Control									

2 MAR 01 2017 DAS 6 9-89

2x 17/03/03 DAS 36 9-89

2 MAR 03 2017 DAS 38 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
3								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 157250***157250***

Page 2

Friday, February 17, 2017 1:31:20 PM

Item ID: 647.3902

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Lower Deflector Assembly, High

Start Date: 2/21/2017 Start Qty: 2.00

2

Cust Item ID:

Required Date: 3/8/2017 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Identify as per dwg & Stock Location: <u>CCF07</u>	0.00							
140									
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER IAW MPP-120***								
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.03							
Quality Control									

DAS
9-899

MAR 01 2017

MAR 01 2017

17/3/16

DAS
21
9-89

MAR 03 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
						QC / QA Coordinator Approval			

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Picklist Print

Friday, February 17, 2017 1:31:19 PM

Page 1

Work Order ID: 157250

157250

Parent Item: 647.3902

647.3902

Parent Item Name: Lower Deflector Assembly, High

Start Date: 2/21/2017

Required Date: 3/8/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 13.09.03 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.3912		Manufactured	No			110	Each	3.0000	1	2			
647.3912									**				
Breakaway Tip Wirestrike for Wire Strike Kit												MAR 01 2017	DAS 6 9-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				CCK077				3					
				127896				3					
647.3914		Manufactured	No			110	Each	4.0000	1	2			
647.3914									**			MAR 01 2017	DAS 6 9-89
Breakaway Tip, Long													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				CCK002				4					
				147490				4					
MS20470AD6-12		Purchased	No			110	Each	395.0000	3	6			
MS20470AD6-12									**			MAR 01 2017	DAS 6 9-89
Rivet													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				CCK003				381					
				m136643				381					
				ST308				14					
				m127304				14					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____			



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

ENGINEERING CHANGE NOTICE NO. 04948

SHEET 1 OF 2

DWG NO. 647.3900

REV: C

PREPARED BY: M. ANDECK

DATE: 05/04/15

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: DEFLECTORS

APPROVED BY:

ENGR

MFG

QC

EFF: CURRENT ORDER

ECR: D-15-01

REASON: REVISED TOLERANCE AND NOTES

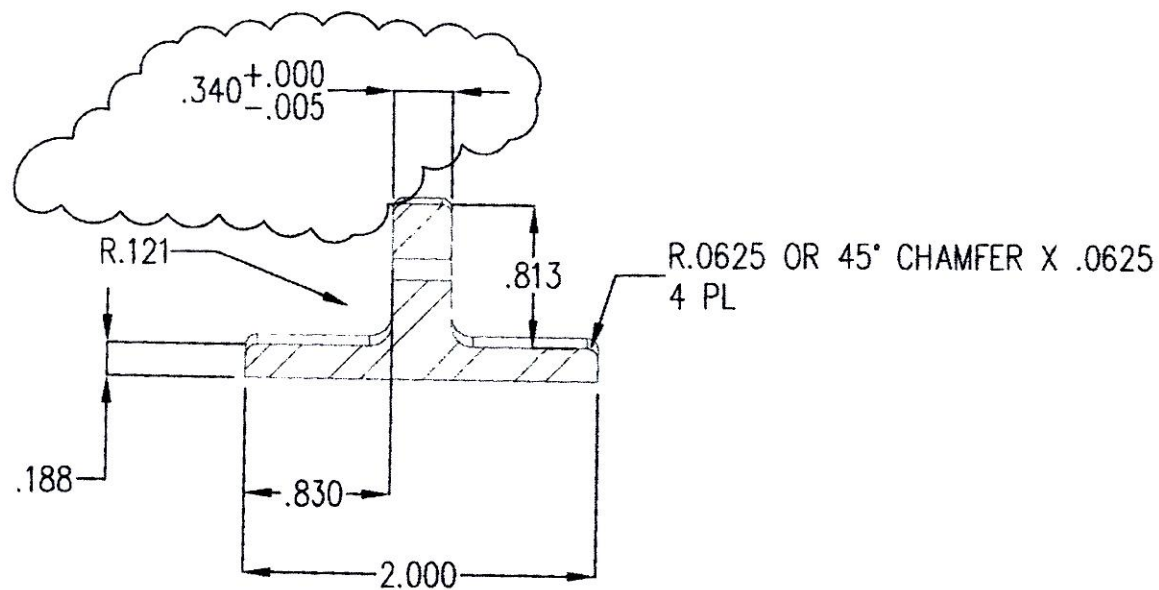
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 157250 MLS
17-02-22

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.
7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES
- 8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.
- 9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX.
- 10 MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4.

SHEET 1, ZONE B1 IS:

11	R	647.3917	2				DOUBLER		
F/N	TC	PART NUMBER	.3903	.3902	.3901		DESCRIPTION	MATERIAL	SPECIFICATION
				QTY					
DOCUMENTS EFFECTED:							CHANGE CATEGORY	DER REVIEW REQUIRED	
							☐ PATTERN ☐ MDL ☐ INSTALL INSTRUC ☐ ICA ☒ BOM	☐ MAJOR ☒ MINOR	☐ YES ☒ NO



SECTION AT-AT

SHEET 11, ZONE C1 IS:

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04556

SHEET 1 OF 2

DWG NO. 647.3900

REV: C

PREPARED BY D. MEJIA

DATE: 06/10/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: DEFLECTORS

APPROVED BY:

ENGR

MFG

QC

EFF.

NEXT ORDER

TRANSACTION CODES (TC):
A-ADD
R-REVISE
C-CREATE
D-DELETE

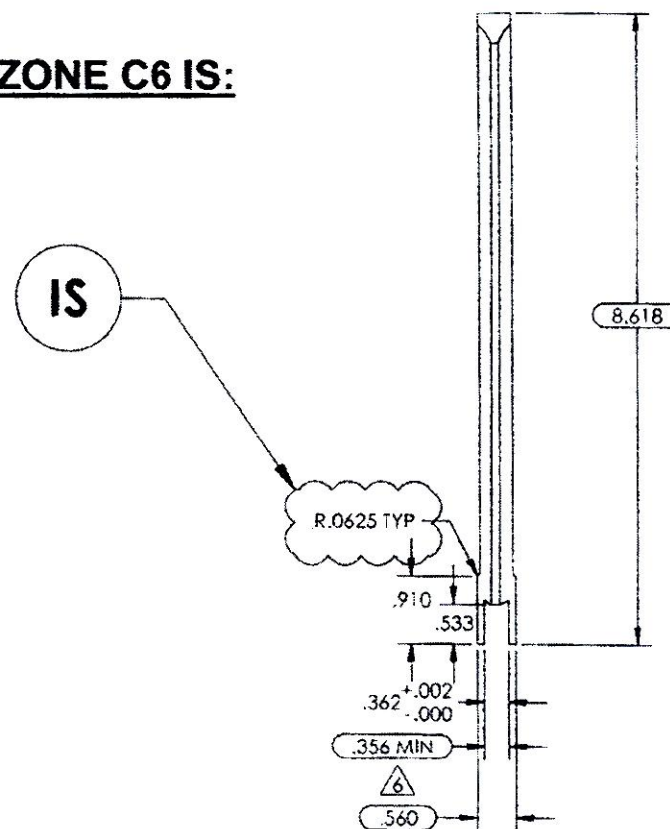
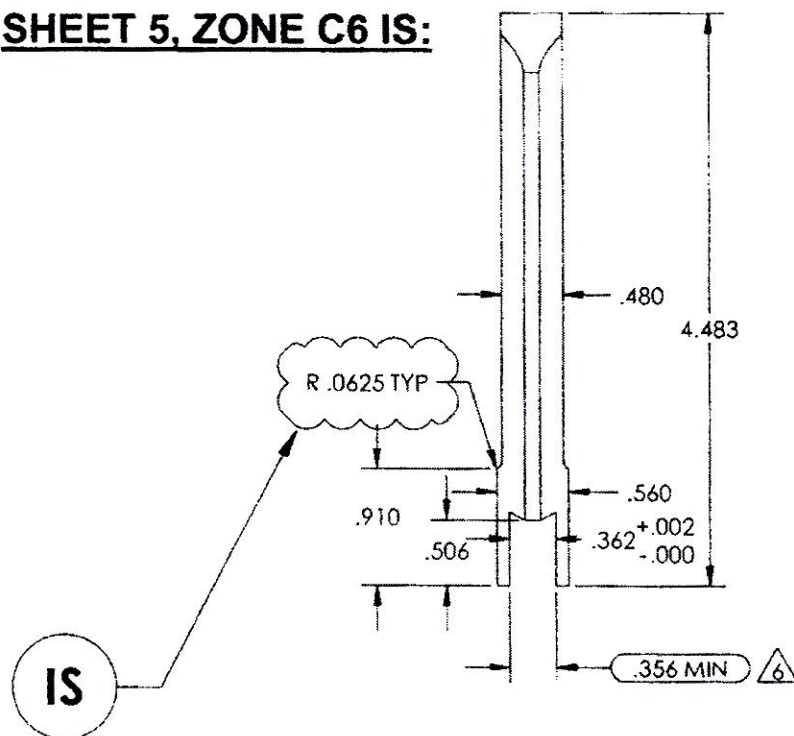
REASON: CHANGED P/N, DIMENSIONS & REVISED BOM

ECR:

D-14-04

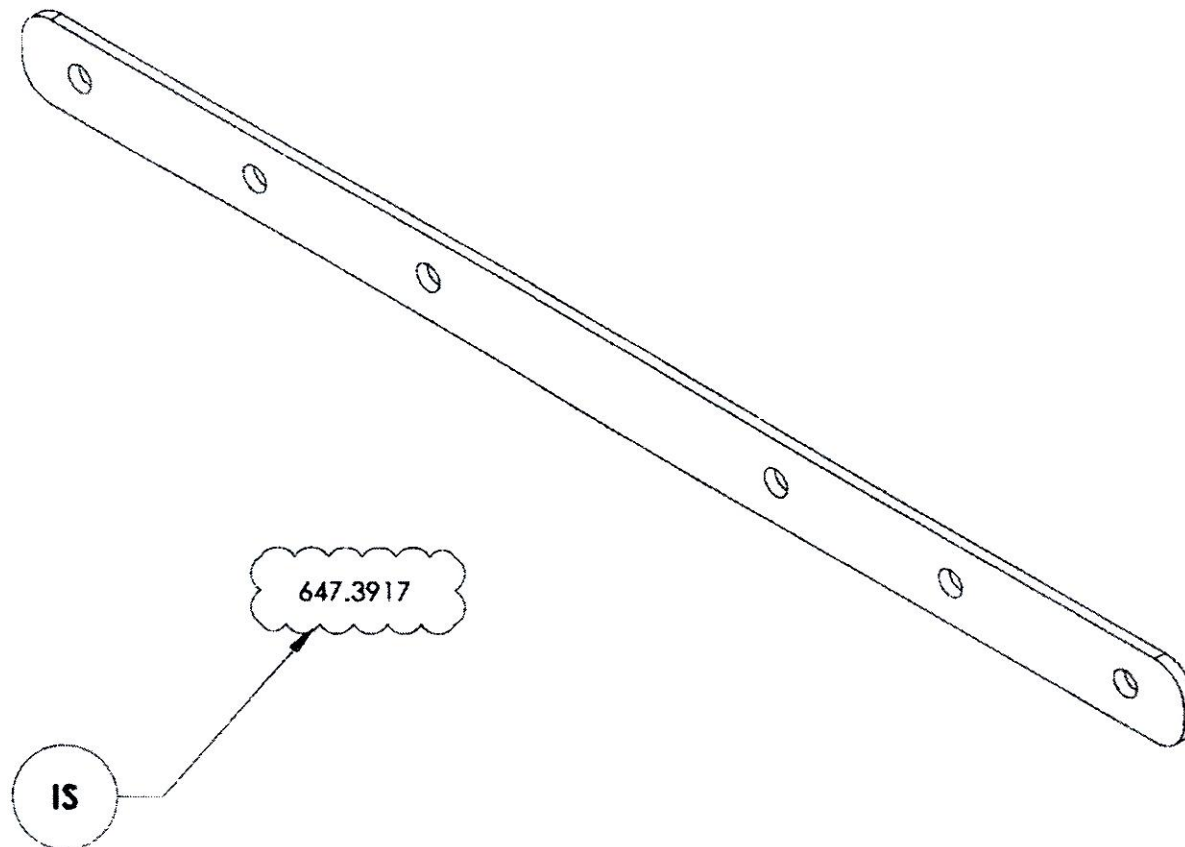
SHEET 5, ZONE C6 IS:

SHEET 6, ZONE C6 IS:



SHEET 1, BOM IS:

11	R	647.3917	2			DOUBLER		
F/N	TC	PART NUMBER	3903	3902	3901	DESCRIPTION	MATERIAL	SPECIFICATION
		QTY						
DOCUMENTS EFFECTED:							CHANGE CATEGORY	
							DER REVIEW REQUIRED	

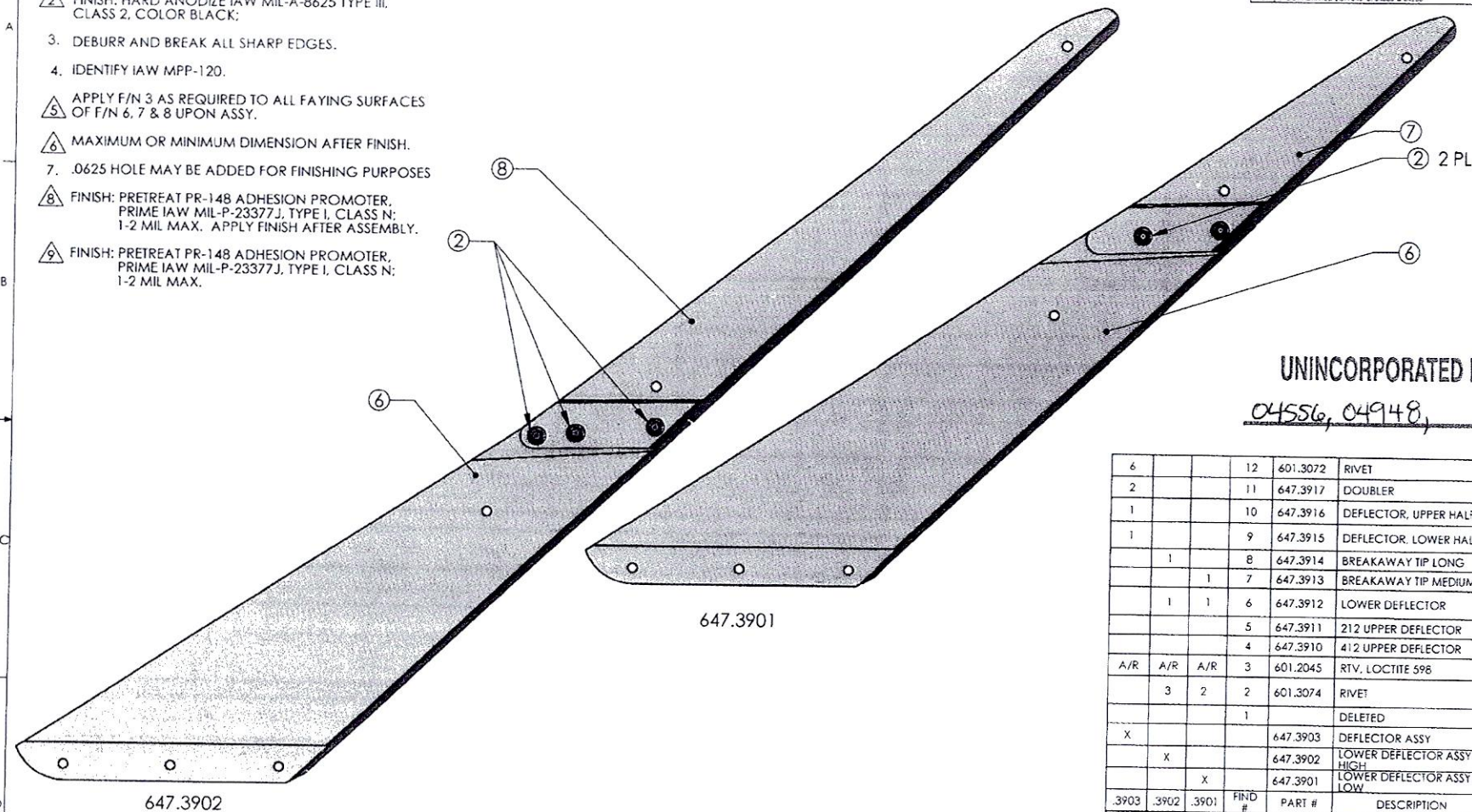
SHEET 12, ZONE B5 IS:

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NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.
7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES
- 8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.
- 9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE RELEASE PER		NIC
2	INITIAL RELEASE	09/10/09	P. BRAVO
3	INCORPORATED ECN 0384, 0389 & 0393	07/24/12	P. BRAVO
4	INCORPORATED ECN 0425	08/02/13	P. BRAVO
5	INCORPORATED ECN 0478, 0485 & 0490	11/18/13	P. BRAVO



UNINCORPORATED ECN(S)

04556, 04948,

6		12	601.3072	RIVET	CR3213-6-9	
2		11	647.3917	DOUBLER		
1		10	647.3916	DEFLECTOR, UPPER HALF	△	△
1		9	647.3915	DEFLECTOR, LOWER HALF	△	△
	1	8	647.3914	BREAKAWAY TIP LONG	△	△△
		7	647.3913	BREAKAWAY TIP MEDIUM	△	△△
	1	6	647.3912	LOWER DEFLECTOR	△	△△
		5	647.3911	212 UPPER DEFLECTOR	△	△△
		4	647.3910	412 UPPER DEFLECTOR	△	△△
A/R	A/R	A/R	3	601.2045	RTV, LOCTITE 598	△
	3	2	2	601.3074	RIVET	MS20470AD-6-12
		1		DELETED		
X			647.3903	DEFLECTOR ASSY		△
	X		647.3902	LOWER DEFLECTOR ASSY HIGH		
		X	647.3901	LOWER DEFLECTOR ASSY LOW		
.3903	.3902	.3901	FIND #	PART #	DESCRIPTION	MATL SPEC
QTY	PARTS LIST					
NEXT ASSY (S)				ORIGINAL DATE		
647.3800				DRAWN BY: 09/10/09		
				CHECKED: 01/09/09		
				DRAWING APPROVAL: P. BRAVO		
				CONTRACT NO.		
				UNLESS OTHERWISE SPECIFIED		
				DIMENSIONS ARE IN INCHES		
				2 PLACE DECIMALS ±.01		
				3 PLACE DECIMALS ±.001		
				ANGLES ±.5°		
				SHEET 1 OF 12		

APICAL INDUSTRIES

2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

DEFLECTORS

SHEET 1 OF 12

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.125 X 45.0° TYP

SECTION B-B

Ø.177 THRU 3PL

.266 X 17.9°

DETAIL A

.045

.603

R.915

.923

4.220±.002

2.110±.002

R.279 R3.406

15.896

15.304

15.046

B

B

Ø.189

6.446

40.2°

.312

0

18.502

18.127

35.8°

10.702

8.599

6.253

1.700

.777

0



DETAIL C

.035 X 45.0° TYP

.375

15.896

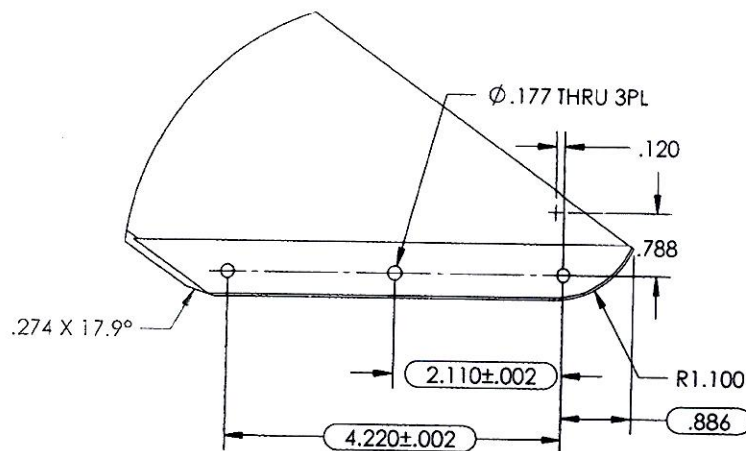
647.3911

ORIGINAL DATE 10/24/00		APICAL INDUSTRIES	
DRAWN BY D. SCHUP		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5300	
CHECKED BY D. BARKER		DEFLECTORS	
DRAWING APPROVAL P. BLAND		SRE	SCALE NONE
DATE 10/24/00		DATE CODE B 07/02/06	REV C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. PLACE DECIMALS ± .01 2. PLACE DECIMALS ± .005 ANGLES ± .5°		DWG. NO. 647.3900	SHEET 2 OF 12

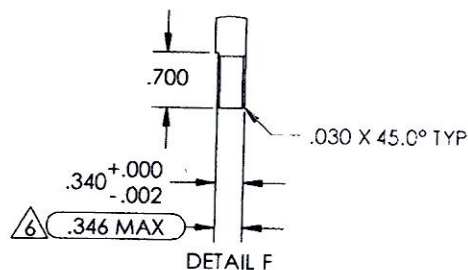
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25 X 44.9°

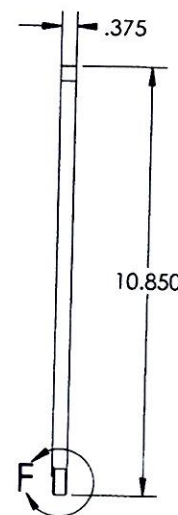
SECTION E-E



DETAIL D



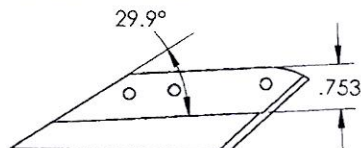
DETAIL F



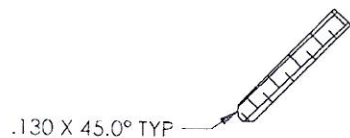
647.3910

ORIGINAL DATE: 01-10-09		APICAL INDUSTRIES	
DRAWN BY: D. SCHUP		2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVAL: P. BRAYC		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
CONTRACT NO:		DEFLECTORS	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS .01 3 PLACE DECIMALS .005 ANGLES ± .5°		SIZE: B	REV: C
		CAGE CODE: 07M16	DATE: 07/16
		DWG. NO: 647.3900	SHEET 3 OF 12
		SCALE: NONE	

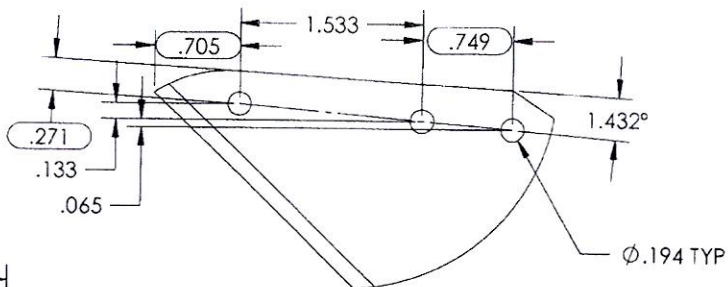
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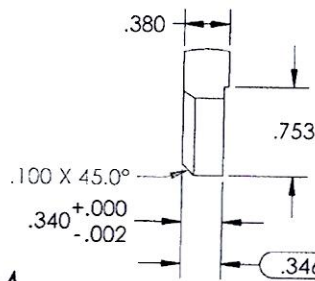
SECTION L-L



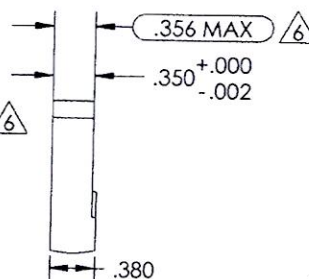
SECTION M-M



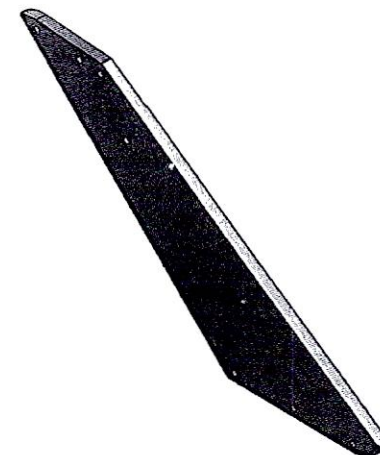
DETAIL H



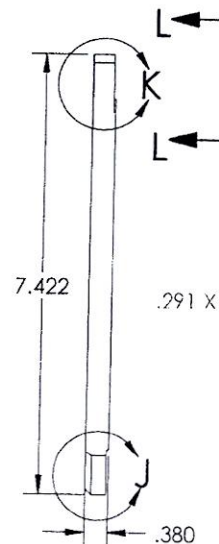
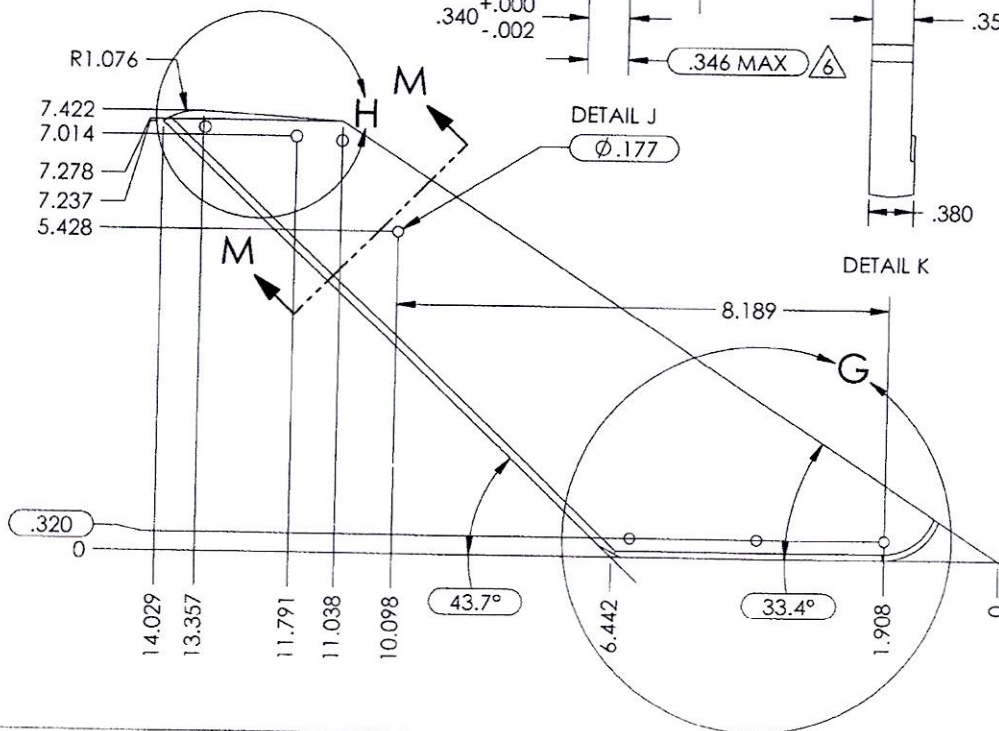
DETAIL J



DETAIL K



647.3912



DETAIL G

ORIGINAL DATE: 06-10-09		APICAL INDUSTRIES	
DRAWN BY: D.SCHUR		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: J.BARKER		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL: P. BARKER		DEFLECTORS	
CONTRACT NO.		SHEET 4 OF 12	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		SCALE: NONE	
TOLERANCES ARE:		REV. C	
2 PLACE DECIMALS ± .01		PART NO. 647.3900	
3 PLACE DECIMALS ± .001		CAGE CODE B 07M26	
ANGLES ± .5°		EING NO. 647.3900	

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.180 X 45.0° TYP

SECTION N-N

R.269

R3.534

SECTION AD-AD

4.483

3.696

Ø.189 THRU 2PL

Ø.194 THRU 2PL

1.196

.506

.337

R.264

41.9°

31.4°

8.007

7.749

7.036

6.618

4.029

3.414

3.284

1.780

3.376

.917

3.135

1.504

.417

R1.675

.130

647.3913

4.483

AD

AD

.356 MIN

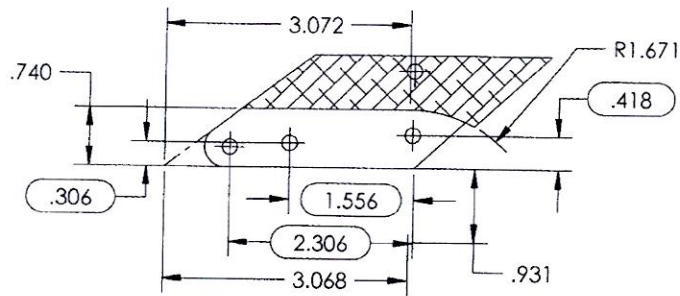
6

ORIGINAL DATE 8/20/81		BY J. H. HARRIS	
DRAWN BY J. H. HARRIS		CHECKED J. H. HARRIS	
DESIGNED BY J. H. HARRIS		APPROVED BY J. H. HARRIS	
CONTRACT NO.		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES			
APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300		DEFLECTORS	
SIZE B	CAGE CODE 07M26	DWG. NO. 647.3900	REV. C
SCALE NONE		SHEET 5 OF 7	

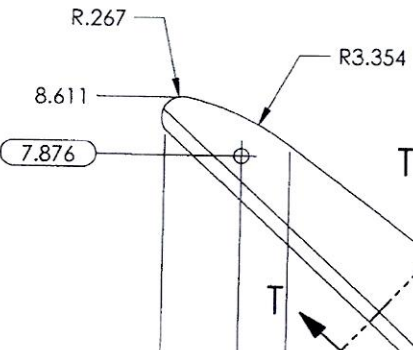
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.175 X 45.0° TYP

SECTION T-T



SECTION AB-AB



Ø.189 THRU 2PL

Ø.194 THRU 3PL

R.050 TYP

R.255

.910

.533

.362

+.002

-.000

.356 MIN

.560

6

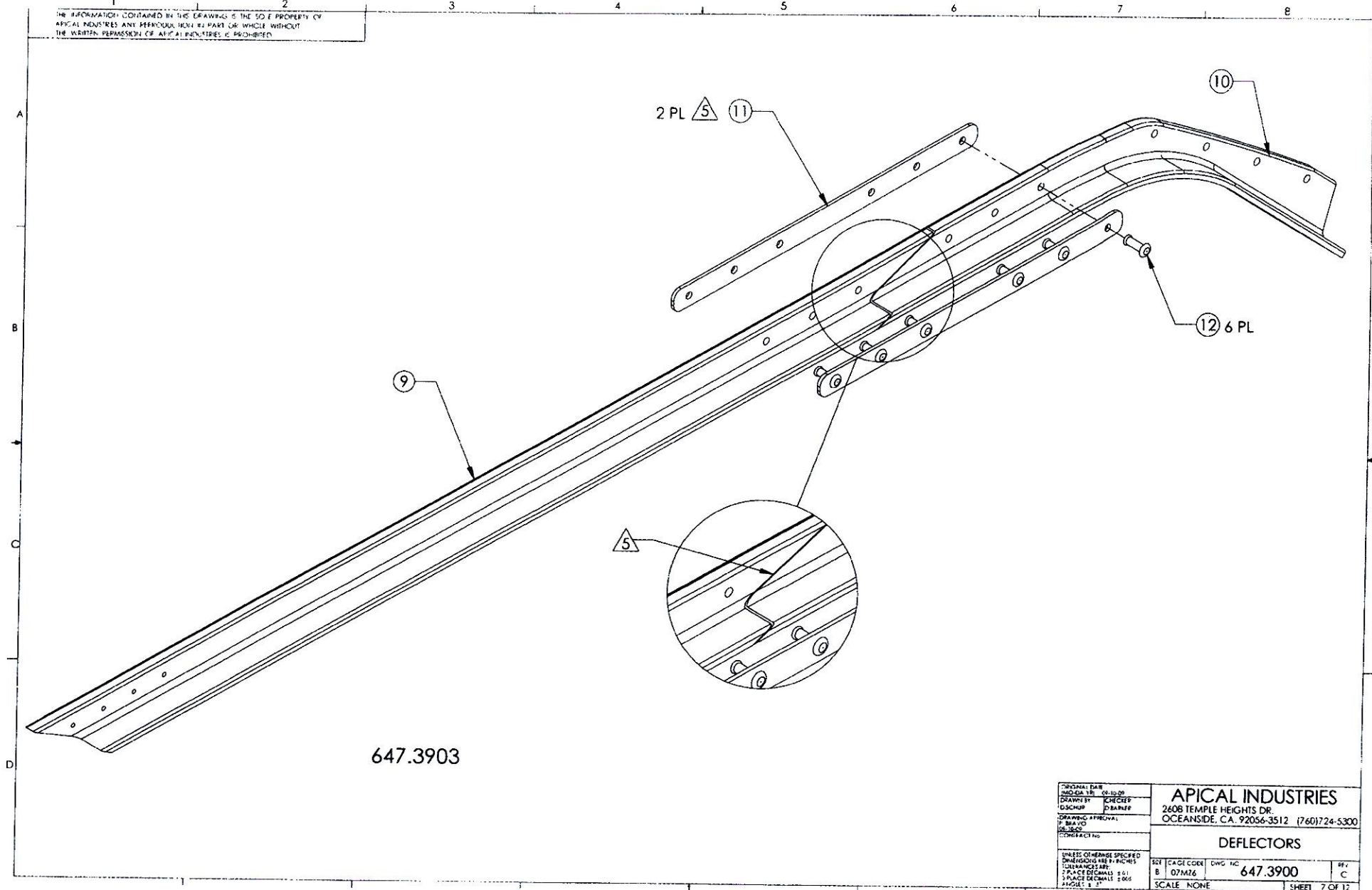
.560

8.618

647.3914

ORIGINAL DATE: 01-10-00		APICAL INDUSTRIES	
DRAWN BY: D. SCHUR		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: D. SCHUR		OCEANSIDE, CA 92056-3512 (760)724-5300	
DRAWING APPROVAL: [Signature]		DEFLECTORS	
P. BRAND		SHEET 6 OF 12	
CONTRACT NO:		SCALE: NONE	
UNLESS OTHERWISE SPECIFIED		DOWNSHAFTS ARE IN INCHES	
TOLERANCES ARE:		1 PLACE DECIMALS ±.005	
2 PLACE DECIMALS ±.001		3 PLACE DECIMALS ±.0005	
ANGLES ±.5°		SHEET 6 OF 12	

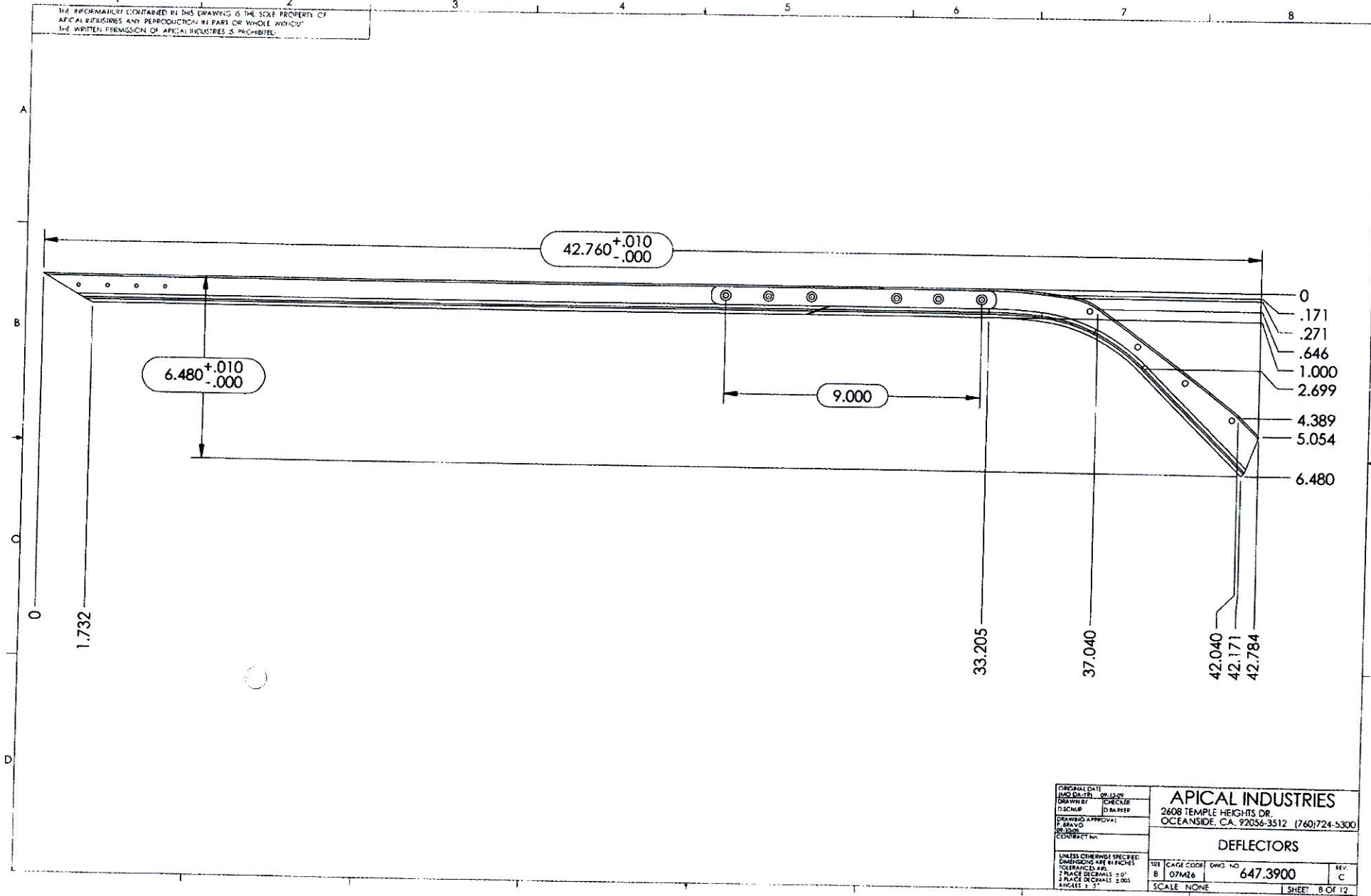
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647.3903

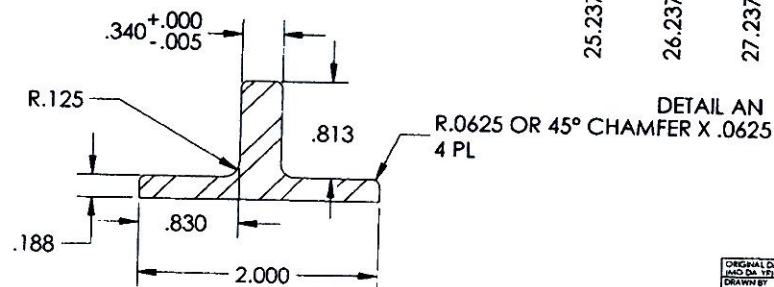
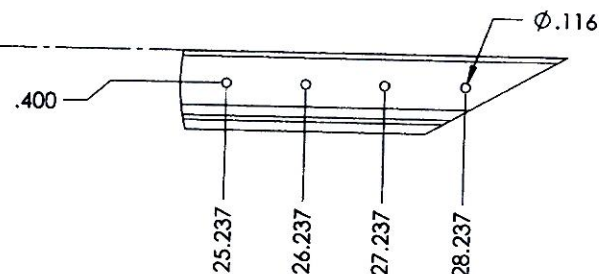
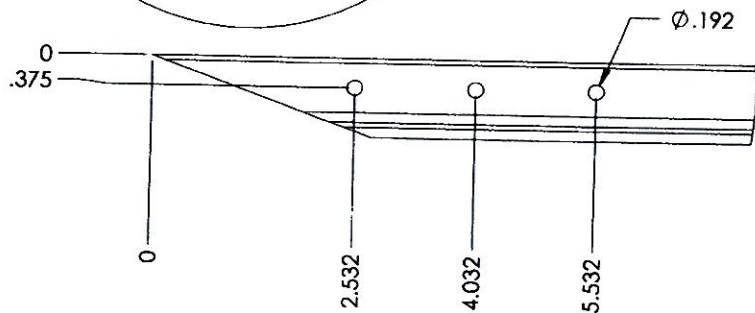
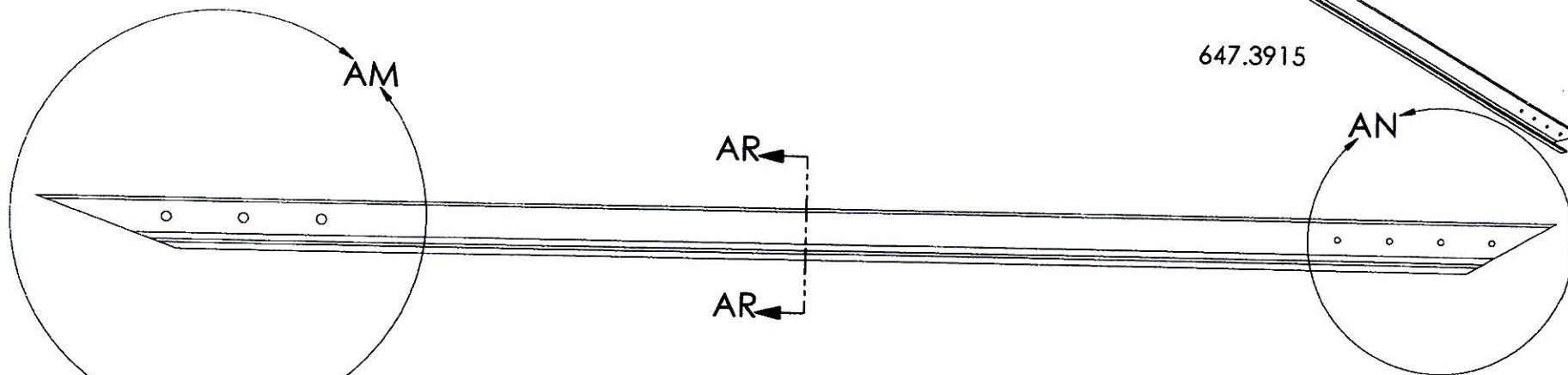
ORIGINAL DATE 10/01/01 10/01/01		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWN BY D. SCHUP		CHECKED BY D. BARNER	
DRAWING APPROVAL P. BARNER		DEFLECTORS	
PROJECT NO. 647.3903		SIZE B	DWG. NO. 647.3900
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± 0.1 3 PLACE DECIMALS ± 0.05 ANGLES ± 1°		SCALE NONE	REV. C
		SHEET 7 OF 12	

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ORIGINAL DATE 10/15/2010 08:12:20		APICAL INDUSTRIES	
DRAWN BY D. SCHUB		2608 TEMPLE HEIGHTS DR.	
CHECKED BY D. BAKER		OCEANSIDE, CA. 92036-3512 (760)724-5300	
DRAWING APPROVAL P. BRAY		DEFLECTORS	
CONTRACT NO.		647.3900	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .01$ 3 PLACE DECIMALS $\pm .005$ ANGLES $\pm .1^\circ$		SIZE B	REV. C
SCALE: NONE		SHEET: 8 OF 12	

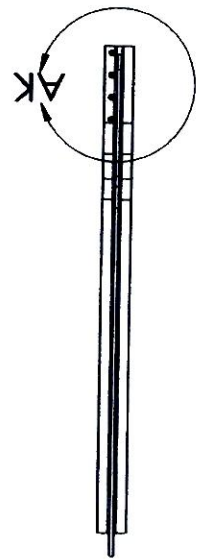
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SECTION AR-AR

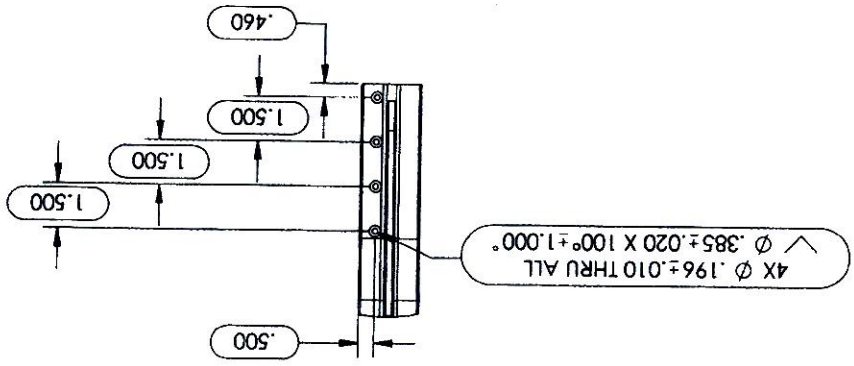
ORIGINAL DATE 10/01/00		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWN BY D.J. CHUR	CHECKED BY D. BARNER		
DESIGNING APPROVAL P. BILLY		DEFLECTORS	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACES DECIMALS ± .01 3 PLACES DECIMALS ± .005 ANGLES ± .5°		REV. 1 DATE 00/01/00 DWG. NO. 647.3900	REV. 1 DATE 00/01/00
SCALE: NONE		SHEET 9 OF 12	

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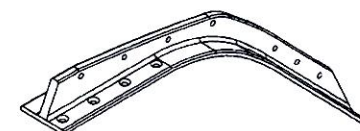
647.3915

DETAIL AK

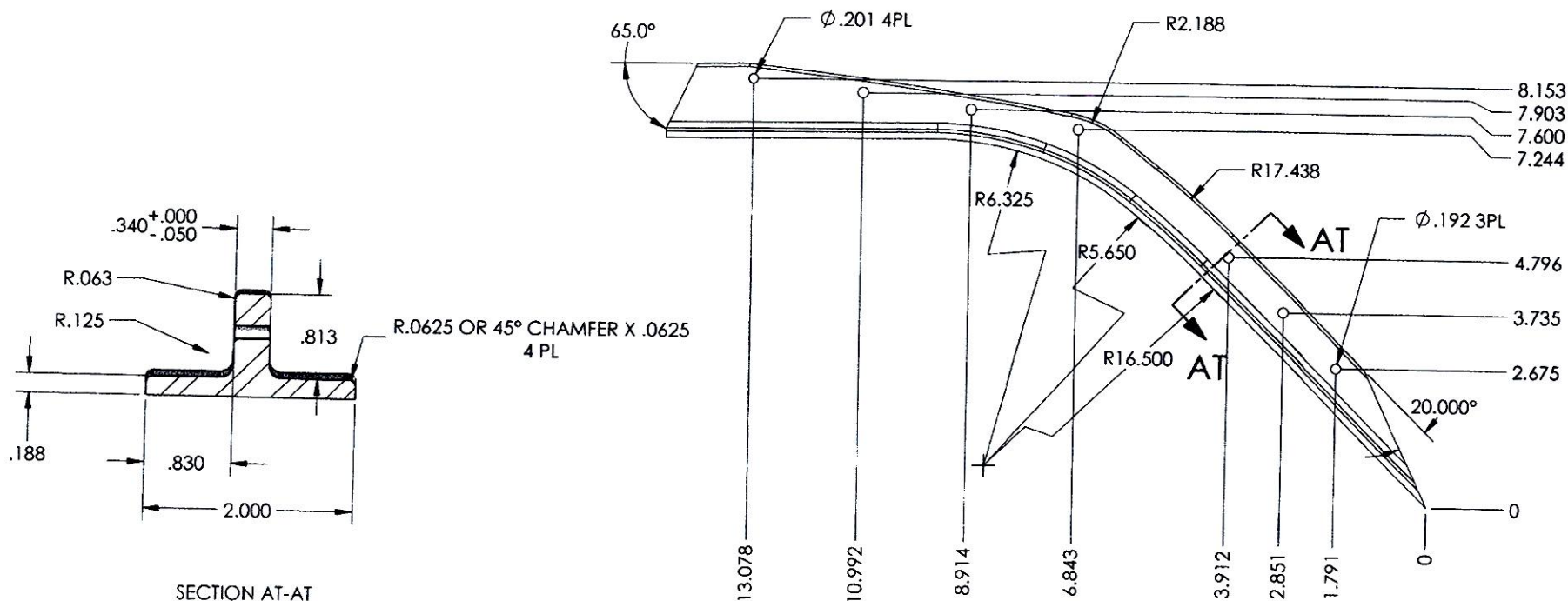


APICAL INDUSTRIES		2608 TEMPLE HEIGHTS DR OCEANSIDE, CA 92056-3512 (760) 724-5300	
DEFLECTORS		CONTRACT NO.	
REV	DATE	BY	CHKD
C	647.3900	B	07/24/96
SCALE: NONE		SHEET 10 OF 12	

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647.3916



SECTION AT-AT

ORIGINAL DATE JUN 04/98 ON 3306	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300			
DRAWN BY D. SCHUR				DESIGNED BY D. BARNER
DRAWING APPROVAL P. BRAY				DATE 06/05/97
CONTRACT NO.				
DEFLECTORS				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMAL: ±.01 2 PLACE DECIMAL: ±.005 3 PLACE DECIMAL: ±.001 ANGLES: ±.5°		SHEET B	CAGE CODE 07M26	
SCALE NONE		DWG. NO. 647.3900	REL. C	
SHEET 11 OF 12				

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